



**KEYNOTES:**

1 PIPING CONNECTING TO SEPARATE SYSTEMS TO PERMIT BACKUP BOILER TO PROVIDE SUPPLEMENTARY HEATING IF ONE BOILER BREAKS DOWN. VALVES (AS SHOWN) TO BE NORMALLY OPEN OR NORMALLY CLOSED TO ISOLATE SYSTEM.

- LEGEND:**
- NEW PIPING OR EQUIPMENT
  - EXISTING PIPING OR EQUIPMENT
  - HWS — HOT WATER SUPPLY
  - HWR — HOT WATER RETURN
  - WMU — WATER MAKE-UP UNIT
  - CPF — CHEMICAL POT FEEDER
  - EXP — EXPANSION TANK
  - PU — PUMP
  - B — BOILER
  - HX — HEAT EXCHANGER
  - F.D. — FLOOR DRAIN
  - PT — PRESSURE TEMPERATURE INDICATOR
  - CP — CIRCULATING PUMP
  - PG — PRESSURE GAUGE
  - T — THERMOMETER
  - BV — BALL VALVE
  - BV — BUTTERFLY VALVE
  - CV — CHECK VALVE
  - BV — BALANCE VALVE (CIRCUIT SETTER)
  - STR — STRAINER
  - FL — FLANGE
  - RI — REDUCER/INCREASER
  - TDV — TRIPLE DUTY VALVE c/w CHECK VALVE
  - SD — SUCTION DIFFUSER c/w STRAINER
  - PRV — PRESSURE RELIEF VALVE SIZED TO DEPARTMENT OF LABOUR REQUIREMENTS
  - T — TEMPERATURE SENSOR
  - — CONTROL WIRING
  - ◇ — FILTER
  - — SITE GLASS
  - OTS — OUTDOOR TEMPERATURE SENSOR
  - UN — UNION
  - DPT — DIFFERENTIAL PRESSURE TRANSMITTER
  - VFD — VARIABLE SPEED DRIVE
  - PT — PRESSURE AND TEMPERATURE INDICATOR
  - CE — CAPPED END
  - CPF — CHEMICAL FEEDER
  - 2-WAY — 2-WAY MODULATING CONTROL VALVE
  - TP 1 — TIE-IN POINT

**NOTE:**

1. FLOW 14.7 L/s (233 GPM)  
HEAD 200 kPa (67 FT.)
2. FLOW 10.2 L/s (162 GPM)  
HEAD 266 kPa (89 FT.)

**1 HYDRONIC HEATING SCHEMATIC**  
SCALE: N.T.S.

SCALE VERIFIED BY: \_\_\_\_\_



B.M. ELEV.			
DESIGNED BY	SHC	CHECKED BY	
DRAWN BY	RLR/TJC	APPROVED BY	
HOR. SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION:	
VERTICAL:			
ISSUED FOR TENDER	12/02/24	DATE	
NO. REVISIONS		DATE	

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DESIGNED BY: SHC  
 DRAWN BY: RLR/TJC  
 CHECKED BY: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 RELEASED FOR CONSTRUCTION: \_\_\_\_\_

ENGINEER'S SEAL  
 PROVINCE OF MANITOBA  
 R.E. DERKSEN  
 REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. M05

**THE CITY OF WINNIPEG**  
 PLANNING, PROPERTY & DEVELOPMENT

PROJECT TITLE: ST. JAMES CENTENNIAL POOL  
 644 PARKDALE STREET  
 BID OPPORTUNITY: 45-2012  
 UPGRADE HYDRONIC HEATING SYSTEM

SHEET OF 005 OF 006  
 COMPUTER FILE NAME: 11-0107-32-M05  
 CITY DRAWING NUMBER